



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

MONDAY, FEBRUARY 9TH, 1857.

JAMES HENTHORN TODD, D.D., PRESIDENT,
in the Chair.

ROBERT M'DONNELL, Esq., M.B., and Frederick Field, Esq.,
were elected Members of the Academy.

Sir William R. Hamilton read a paper on the Icosian Calculus.

Mr. J. M. Kemble, at the request of the President, delivered an Address on the utility of antiquarian collections in relation to the pre-historic annals of the different countries of Europe, with especial reference to the Museum of the Academy.

“DR. TODD, AND GENTLEMEN OF THE ROYAL IRISH ACADEMY,—I should be guilty of great affectation were I to pretend that I thought what I mean to say was entirely devoid of novelty and interest to you. It is, in fact, mainly on account of the extensive opportunities which I have enjoyed of seeing what is new to many of us in the various European collections, that I am this evening called upon to address you. Nor can I venture to plead that I am not in the habit of putting forward my views in public whenever it appears to me desirable for our common study that it should be done; but still, I may justly say, that I never rose under feelings of greater embarrassment than at present, to address any academical body. I feel abashed at the extent of the subject itself with which I have to deal, and painfully aware how small a part of it I can treat of with satisfaction, either to yourselves or myself, within the limits of one short evening. I am not the less painfully aware that I am addressing a body of gentlemen who have bestowed great zeal and labour upon this subject, and whose

names are honourably recorded wherever their labours have been made known. But there is another and special subject of embarrassment peculiar to myself. It is well known to me that a learned friend and colleague of mine has on a former occasion been called upon to address you with regard to the Collection of the Royal Irish Academy, and that the opinions which he on that occasion gave utterance to were put upon record, and circulated to a certain extent with the authority of the Academy itself, from appearing in one of their publications. I regret to say, that I hold very different opinions from my friend Dr. Worsaae; and that from the conviction that the adoption of his opinions, and the pushing them to their legitimate consequences, would betray us into grave historical errors, I feel it my duty on this occasion to protest as publicly against them as he himself gave utterance to them. I think anybody who follows the train of thought of the archæologists of Northern Germany, and more especially what that amiable and accomplished scholar, Dr. Lisch, has raised upon the foundations laid by the *savans* of Denmark, will agree with me that those gentlemen are led into a historical *reductio ad absurdum*. I have myself heard Dr. Lisch declare, in the meeting of the Central Archæological Association of Germany held at Dresden, under the presidency of his Majesty the present King of Saxony, that the Germans were totally unacquainted with the use of iron, and that this was first introduced into the provinces of the Baltic by the Slavonic tribes in the eighth century. Errors like these are hardly to be excused, and are perfectly unintelligible in any classical scholar. Now, I do not deny that there is a great convenience in the division adopted by the *savans* of Denmark, into the products of a Stone, a Bronze, and an Iron period. I believe that this has some foundation in historical truth, and I am perfectly aware of its value in the co-ordination and arrangement of a museum. It is, however, no novelty: the main characteristics of the principle were re-

cognised two centuries ago by Eckhart, the continuator of Leibnitz, and by other eminent German scholars. But the extension of it into a system attempted to be founded upon history is due to the present race of Danish archæologists, and it is to their conclusions, in as far as these are of a special nature, that I refer, and against which I feel bound to enter my public and energetic protest. There is no doubt, Gentlemen, that in the earliest ages of culture, weapons and implements are formed of the rudest materials accessible to man ; that he is acquainted with wood, and horn, and stone, before he obtains a sufficient mastery over the metals to convert them to the purposes he desires ; and accordingly, we do find implements or weapons both of horn and stone, to the exclusion of the metals, at periods which the lessons of Geology compel us to place at an almost infinite distance from our own. I would remind you only of the operations of the Commissioners for the improvement of the navigation of the river Shannon. The men of science connected with that great undertaking will assure you that the lowest stratum bearing marks of human life contained implements of stone and horn so far below the first appearance of implements of metal as to imply an almost incalculable lapse of centuries between the two deposits. It is true, that the rudeness of those implements has been and is a cause of great difficulty to the archæological inquirer. It has long been found one of the most difficult problems, how these instruments were to be made use of, and it is only of late that discoveries have been made which enable us to form a distinct opinion on the subject. Let me call your attention to some of these rude prisms of flint contained in the cases in the next room. They seemed incapable of being turned to any use ; but in excavations of recent date lately made in the valley of the Somme, in strata upwards of twenty feet below the present level of the surface of the earth, in company with the bones of the rhinoceros and other animals extinct in these parts of the world, there have

been found portions of the horns of the elk and of deer belonging also to extinct species, which bear obvious marks of the work of man's hands : and in these we find the explanation we seek.

“ Let me call your attention for a moment to the nature of those weapons. They consist for the most part of a portion of stags' horn, from four to six inches in length, bored transversely for the reception of the handle, and at one end, or both, also bored for the reception of a stone point. Accompanying these, and in such a position that there can be no doubt of their having belonged to one another, are not only such prisms of flint as I allude to, but also small flint celts of elaborate workmanship and polish. It is remarkable that the transverse or shaft hole is extremely small, and could have received only a frail handle ; but in one instance or in more it has been discovered that the point of the tyne was used for this purpose, and that thus a hammer, small, indeed, in its proportions, but efficient in the absence of defensive armour, was produced ; and, indeed, in some cases it is clear that the sharp point of the tyne itself was inserted in the longitudinal opening—thus making a formidable pick, which might be used not only for purposes of peaceful life, but also for purposes of offence. And, unless I have been greatly misinformed, a skull has been exhumed in Sweden in which such a weapon was actually found inserted. The stone edge given to the horn weapon, and which we may suppose to be of somewhat later introduction than the mere sharpened horn itself, was fixed in its place by the use of some cement, the composition of which is at this hour unknown to us.

“ The analogy of various savage tribes that armed their weapons with the edge of sharpened sharks' teeth is borne out by the analogy of those bone weapons of the North which occasionally received their edge from the insertion of fitting portions of flint. In the Museum at Copenhagen there is such a spear-head, and there are two knives, of elaborate workman-

ship, in the Royal Museum at Berlin, whose edges are produced by sharpened filaments of flint. I need scarcely remind you that the weapons of the Mexicans were in like manner armed with portions of obsidian. Now, the cases to which I allude are not solitary, but numerous. Upwards of forty have, I believe, been collected in the alluvial tract wherein the waters of the Somme now flow, and in all probability they would be much more numerous had due observation been exercised by collectors. One single instance is, however, known to me as having occurred in the British Islands, and that within a few weeks only. In the tract called Wychwood Forest, in Oxfordshire, the surveyors employed by the Government discovered a rude interment, little below the surface, but which had apparently never been disturbed. Together with pottery, of the oldest description, and bones of various kinds, was found such a portion as I have described of stag's horn, so prepared to receive a cutting edge. Mr. Queckett, of the College of Surgeons, to whom this was shown, investigated it by the aid of a microscope, and declared it to be a portion of the horn of a deer long extinct in England

“Now, Gentlemen, we may fully admit that many implements of stone which are discovered do belong to the earliest period of human culture, and that the analogies upon which the so-called Stone period has been rested are not entirely to be despised; but experience teaches us that the use of stone continued long after those ages passed; and it is consonant to human nature itself that this should be the case. The weapon which, when launched by the hand, is not to return to its owner, may easily be of less valuable material than that which the man looks upon as connected with his own person; and thus the arrow-head of flint may easily have been contemporaneous with the period of Iron. The want of value in the material pointed it out for the manufacture of these articles, the use of which implied their loss. We have the historical evidence of Ammianus Marcellinus that the Huns—a race un-

doubtedly well acquainted with the use of metallic weapons—were universally in the habit of pointing their arrows with sharpened bone.

“ But there is another ground, of a general character, for the use of those implements at times very much later than those to which they are attributed in the theory of our Scandinavian friends. The man who finds a weapon of this description, and thinks he can turn it to advantage, is likely enough to do so, without inquiring whether the requirements of a philosophical system will be much disturbed by his act or not. We are aware that at the battle of Hastings, in 1066, the Saxons used battle-mauls made of stone, which they hurled against their adversaries. We know that, even as late as the Thirty-years War, the soldiers of Wallenstein and Tilly, here and there, for want of better implements, used the old stone hammers as efficient weapons of attack. Nay, more, to this day the peasant of Brittany, if, while tending his sheep upon the plains, he discovers one of the polished celts of his forefathers, takes it at once to the neighbouring forest, and there, splitting the branch of a young tree, inserts it, well assured that, in the course of a year or two, the operations of nature will have fixed it with such firmness in the cleft, that he has but to cut the handle, and his axe is ready made to his hand.

“ All these are grounds of disturbance, and will render it impossible to apply with strictness the canon of Copenhagen to the characterizing the graves according to their different periods. But there is another and a very strong ground of disturbance.

“ Certain races of the world, as it is well known, have attached a strong superstitious feeling to the possession of these ancient stone implements; and when they have found them, they have treasured them as something supernatural. In many parts of Germany, and, as I am informed, in Ireland and Scotland also, they are still looked upon as amulets particularly valuable in the diseases of cattle. The collector

meets with no greater difficulty than that which occasionally arises from the disinclination of the possessor of such a stone to give up what he looks upon as a useful remedy for the sickness of himself and his neighbours ; and in many parts of Germany it is strongly believed that these ‘*donnerkeile*,’ as they are called, or thunderbolts, are an efficient preservative against lightning. You will see that this is a mere remnant of the old Thor worship amongst the Germanic population. The concurrent testimony of ecclesiastical and secular history proves to us that the Germans attached a superstitious veneration to stones ; and I may mention, as the result of my own experience, that these ancient implements were frequently deposited in the cemeteries even of the latest Pagan race, unquestionably upon some notion of holiness attached to them. These stone flakes, which we are agreed to call knives, are never more usual than in the neighbourhood of graves of the Iron period ; and one of the surest indications I have had, that I was in the neighbourhood of such a cemetery, was the finding multitudes of those flint chips in the soil about me. On one occasion I remember, after exhuming nearly two hundred urns, containing chains and fibulæ of bronze and iron, I came upon a small cyst, in which were deposited a magnificent hammer-head of black basalt, and one of those flint daggers which, I believe, are unknown in this country, but of which you have a specimen in the collection the King of Denmark sent to the Royal Irish Academy. In a similar way, from the cemetery at Retdorf upwards of ninety urns were taken, furnished with one broken dagger of silex, and with many hundred flint chips, not rarely deposited intentionally around the separate urns themselves. To what race we are to attribute the first construction of these implements, is still a great problem of archæology. All that we can with certainty say is this—that even if constructed in the earliest periods of human culture, they continued, for various reasons, to be used almost until we come to the threshold of historical

times. A good deal of the same reasoning applies to the weapons of bronze, which, as you are well aware, are found not only in all European, but in many Asiatic countries. There is, as far as I can tell, no evidence whatever of bronze having been used on account of the absence of iron, and not much reason to doubt that the two metals were used contemporaneously. At the same time, I would call your attention especially to the fact that there are varieties in the forms of those implements in different countries. Their principle is, indeed, the same; there is a great general resemblance both in the material of which they are made, and in the gracefulness of the form; but, with all these resemblances, there are still characteristic differences:

“ ‘*Facies non omnibus una,
Nec diversa tamen, qualis decet esse sororum.*’

“ The swords of bronze that are found in these islands are characterized by the absence of a solid hilt of metal. Those of the Continent rarely want it. They are further characterized by a peculiar flatness of blade; those of the Continent are rimmed in a peculiar manner, which, with little observation, enables us to throw them into seven or eight separate classes, all indicative, as I believe, of different dates of antiquity. One peculiarity I am bound to mark, namely, the smallness of the hilt, leading us to the conviction that they must everywhere have been used by a race of diminutive proportions. Again, they are characterized by a total absence of guard, in which they appear to differ from the similar form, which we meet with in bas-reliefs on urns, and gems of Grecian origin. In these, according to the measurement made from many hundred specimens, the hilt is found to bear a very different proportion to the blade, and on the vast majority of Etruscan urns there is a well-defined guard, often of considerable size. Some, it is true, of the Etruscan swords of the earliest class want this; and this is a consideration which re-

quires to be carefully weighed. It has been very generally the habit of archæologists to attribute these bronze weapons entirely to the Celtic race; and, although there are great ethnological difficulties in the way of adopting this view, I am inclined to believe there is much to be said in its favour. The concurrent testimony of all ancient history proves to us, that at the time when the nations we call classical first came in contact with those of the North, both Celt and German had long been in the possession of iron, and formed all their implements of war of that metal. But this does not prevent the possibility of a still earlier race having introduced the sword of bronze of that graceful form with which we are all acquainted; and that these long continued in use, together with the iron weapons which were more particularly affected by the conquerors of Rome. The Roman sword itself, as we know from the undoubted testimony of Polybius, was only replaced by a short stabbing weapon, in the time of the second Punic War; and from the same authority, we know that its pattern was derived from the Iberians in Spain. If now, as is highly probable, those Iberians were only one portion of a vast race, spread over the whole Continent and the islands of Europe, who gradually yielded before the advancing wave of Celtic culture, and were driven into the extreme corners of the West and the North, there is no great improbability that the weapons which they had used, and introduced, continued to be found at a time when the other race was armed with a very different one; and, indeed, I am called upon here to remark, that written history is very sparing in its notice of nations armed with bronze; that nearly the only race of whom this is asserted are the Massagetæ, the progenitors of those Iberians of the Colches, whose connexion with the Iberians of Spain will now hardly be denied. They possessed neither iron nor silver, but had an abundance both of bronze and gold; and they formed their weapons of the former, and their ornaments of the latter metal. That the only other race of whom it is distinctly stated that

they used weapons of bronze, were the Iberians of Lusitania; and that the somewhat weak authority of Xiphilunis repeats the same tradition of a portion of the tribes of Britain. If, now, this short stabbing sword found its way from the East, along the upper coast of Africa, into Spain, and from Spain along the western shores both of France and England into this island, we may readily account, not only for its occurrence in such numerous cases, but also for its continuance at a period when iron weapons were generally used by the Celtic invaders, who occupied the more eastern portion of these islands. And it is a fact of great cogency, that hitherto no mould for the casting of these swords has been found in these islands. Moulds for the production of spears, of rapiers, and other implements of war, have, from time to time, been found; but as yet, for any thing we know, the leaf-shaped sword may have been the result solely of importation from another land. I do not know that there is anything particularly distinguishing the collection of swords in the Royal Irish Academy from those found in other parts of Britain, except the great numbers in which they are found. One form, indeed, I have observed which appears to me to be perfectly unique, and in which, while all the outline is carefully preserved, a bend is given to the blade, making it approach something of the form of a Turkish yataghan. This, as far as my experience goes, is entirely unique in Europe. Amongst those weapons of offence which belong to the class of swords, and which, to the best of my knowledge, have only been found in these islands, there occurs a long rapier-shaped blade of extremely finished workmanship, and, in fact, forming a most dangerous weapon of offence. It has been asked, whether these were not intended to be fixed on shafts, and used as substitutes for the more ordinary spear; but to this a decided answer can be given in the negative, for in the collection of your revered member, Dr. Petrie, is one admirably preserved specimen of this class, in which the handle, formed of hollow bronze, and fitted to the

blade with rivets, is a decisive and unmistakable characteristic. This sort of rapier, it appears, is only an extension of the dagger which has been frequently found both in England, Scotland, and Ireland, with a similar handle attached in a similar way.

“ There is one class of weapons to which I am particularly anxious to call your attention, and of which you possess numerous well-arranged and interesting specimens. This is the weapon which is commonly called the ‘celt,’ or ‘kelt,’ but which, for purposes of distinction, it may be as well always to spell with a C, while we reserve the hard letter for the name of the nation. The origin of this word ‘celt’ is a Latin word, of what has been facetiously called ‘middling and infamous Latinity,’ namely, ‘celtis,’ a chisel; and there can be little doubt that this name is also very indicative of the uses to which it may occasionally have been turned. You are well aware that this is a novel point amongst archæologists; but it is one that, in my humble opinion, can give no difficulty. There can be no doubt that, according to the nature of the handle with which it is furnished, it may be a chisel, or a hoe, or a war-axe. Now, let me call your attention to the importance of consulting the habits of those tribes which are in a similar state to our forefathers at the period when those weapons were in use. Along the whole of the upper tracts of Siberia the Mongul tribes are in the habit of carrying a weapon formed in every respect like our celts, both in the shape which we call the socket, and that which, in imitation of our Danish friends, we have named palstave. The mode of fixing this with a handle is simple, but effective. A piece of bent wood, for which ash or blackthorn is admirably adapted, is fastened in the lower groove of the palstave; another piece of flat wood is placed within the upper groove; and the whole is then carefully wound round with the strong sinew of some animal; and thus is formed an implement which, from personal experience, I can assure you is capable of dealing a most deadly blow.

But a similar kind of the socket celt itself is found amongst the Galbo and Betuan tribes of Africa, differing in no conceivable point from the celt of our own forefathers, save in the material of which the implement is composed. In Africa, as in Siberia, it is of iron.

“There is, perhaps, nothing which so much attracts the attention of the stranger in visiting your noble collection, or on which, perhaps, you pride yourself more, than the unrivalled collection of gold ornaments which enrich this Museum; and you have, no doubt, reason to be proud of them, because they indicate an advanced stage of culture and a widely extended commercial intercourse between your forefathers and other nations of the world; but I would warn you to value them only on this account, for believe me, no more fatal danger can arise to Archæology, or, indeed, to the moral development of man, than fixing the eyes upon the intrinsic value of articles of ornament, rather than upon the art itself with which they are adorned. With the sole exception of the Museums of Scandinavia, which probably derived many of their treasures from successful thefts in this island, there is scarcely one European collection which shows anything like so great a wealth of personal ornament formed of precious metal. It is, indeed, possible that Gaul may have rivalry with you in its wealth of gold. Unhappily, the discoveries that have been made there have not been preserved with sufficient care, and avarice has consigned to the melting-pot specimens of ancient art, the study of which might have led us to conclusions of the utmost importance. There is nothing in those grand tiaras of gold which strike every stranger who enters the next room, that is unexampled in the Museums of Northern Germany, except as to the metal of which they are formed. The general outline is the same, and a good deal of the ornament is so also; but it is precisely at this point that I touch upon the archæological distinction, which, in my mind, is of the utmost possible importance, and to which I venture to call

the earliest attention of the Academy. The ornamentation is different in principle; and in this difference of principle, unless I greatly err, we should be led to detect some ethnographical and historical facts of very great importance to our study.

“The ornamentation which prevails upon almost all the bronzes of the Continent consist of a spiral line, which, to the best of my knowledge, is never found upon works of Irish art at this early period, but is invariably replaced by ornaments of concentrical circles. The spiral line to which I allude is, however, not a single one, but a double spiral, by means of which alone it is possible they could become continuous. A single spiral line drawn down from a point, and turning on itself, ends with a second circular figure, and goes no further. But if a second spiral spring from the centre, in a common point, in which the second follows the windings of the first, it escapes, and so renders it possible that a constant succession of this figure may be upon the same plain surface. Now, this figure is essentially and peculiarly Greek; it is found on the friezes of Greek temples; it is found in the monuments of Etruscan art, but it is not found upon the art of England and Ireland: and in this, I believe, lies the key to a historical distinction, which it is of great moment for us fully to comprehend and study. It bears upon a fact which has long become clear to me from a comparison of many other cognate facts—namely, the two great streams of culture that enrich the north of Europe: one, passing along from Upper Italy, over the Alps, into Slavonic lands; thence following the spurs of the Carpathians, spreading through Styria and Transylvania, through Moravia and Bohemia; next following the line of the Elbe, and flooding the countries between its banks and the southern coast of the Baltic—nay, even crossing the Baltic itself, to take in the south of Sweden and the Danish islands, ended, at last, in Holstein and Ditmarsh. While the second stream, coasting the north coast of Africa, ran westward and

northward, and found its principal development in this island of the Atlantic Ocean.

“ But let me not be misunderstood. There is a peculiar development of the double spiral line, totally unknown to the Greeks, the Etruscans, and the nations of the Teutonic North, which is essentially characteristic, not only of the Scoto-Keltic, but the Britanno-Keltic populations of these islands. If the lines are allowed to diverge, instead of following one another closely in their windings, they produce that remarkable pattern which since a few years we have been in the habit of calling the trumpet pattern, and which, from one of its peculiarities, is sometimes called the *thumb* pattern. When this is represented in a plane surface, in the illuminations of MSS., you have that marvellously beautiful result which is familiar to you in the ‘Book of Kells;’ to us in the ‘Book of St. Cuthbert,’ or ‘The Durham Book,’ in the British Museum; and in the equally beautiful records of Scoto-Keltic self-devotion and culture in the MSS. of St. Gall in Switzerland. When, as is often the case in metal, this principle of the diverging spiral line is carried out in *repoussé*—when you have those singularly beautiful curves—more beautiful, perhaps, in the parts that are not seen than in those that meet the eye—whose beauty, revealed in shadow more than in form—you have a peculiar characteristic—a form of beauty which belongs to no nation but our own, and to no portion of our nation but the Keltic portion. There are traces of it, faint and poor, but sufficient for identification, among the Kelts of Normandy and the Keltic Helvetians. But the most perfect specimens of it are met with in these islands: I may mention, among them, that exquisite specimen of workmanship, the Goodrich Court shield, found in the bed of the river Witham, in Lincolnshire; the even prior specimens being parts of shields dredged out of the Thames in laying the foundations of Waterloo Bridge; the sword belonging to the Witham shield, now at Alnwick Castle; and one or two very beautiful spe-

cimens in this country, one of the very finest of which is in the collection of the College of St. Columba. You have several of them in the cases in the next room; and perhaps there is in all Europe no more striking one than an implement of unknown use in the possession of our great archæological master, Dr. Petrie. For beauty of design and beauty of execution this may challenge comparison with any specimen of cast bronze work that it has ever been my fortune to see. I have been able to notice but a few transcendant specimens; but works of this kind are far from rare. Although they began early—earlier than the intercourse of Rome with these islands—they continued late; and to the last moment of real, unmixed Keltic art, this is its great and distinguishing characteristic. It deals with curves, which are not arcs of a circle; the combinations which form its exquisite curved outlines are derived from the ellipse; its figures are not of the class we usually designate by the term geometrical. And, above all, it calls in the aid of enamel to perfect its work,—enamel, Gentlemen, not *cloisonné*, like the enamel of the East; no mosaic work of tesserae, like so many so-called enamels of the Romans, but enamel, *champlevé*, as Philostratus described the barbarians, ἐν τῷ ὠκεάνῳ, the island-barbarians to have invented it. The Goodrich Court shield is ornamented with enamel—*champlevé* enamel, on its bronze baze. Many of your horse-trappings are so; more are so in England; and it is possible that the Britanno-Keltic art affected this mode of ornament more than the Scoto-Keltic. But let me remind you that this brilliant ornamentation of horse-furniture is distinctly noted by Pliny as a characteristic feature of Keltic art. The specimens that we have from Yorkshire, Suffolk, Norfolk, Somersetshire, Surrey, from Scotland, from this island, prove its wide dispersion, and justify the observations of the Roman admiral and philosopher. These are, in truth, the great characteristic differences to which I would, above all things, direct your attention. The engraved spiral line, with double winding, is

found from America to the Baltic, from Greece to Norway ; but the divergent spiral line (*repoussé*, in metal of a later date), and ornamented with *champlevé* enamel, is found in these islands alone, or in the neighbourhood of these islands ; it vanishes in proportion to its distance from them. There is in all this not the slightest trace of the influence of what we call classical art. The trumpet pattern is neither Greek, nor Roman, nor Oriental. There is nothing like it in Etruscan art ; there is nothing like it in German or Slavonic art ; there is little like it in Gallic or Helvetian art : it is indigenous, Gentlemen. The art of those Keltic tribes which forced their way into these islands of the Atlantic, and somewhat isolated here, developed a peculiar, but not the less admirable system of their own. And let me beg you to compare with it some of those admirable specimens of Germanic art of which England furnishes so many examples, in that country which was most continually subject to Frankish influence ; and of which the finest examples of all are to be found in the cabinet of Mr. Mayer, of Liverpool. In these you have merely geometrical figures—circles and parts of circles, triangles and squares, lozenges and horizontal zig-zags. Enamel has ceased ; it is replaced by niello. Amber is unknown ; but turquoises and slabs of garnets, or coloured glass, have become common. Each form of art is beautiful in its way ; but each has a character so peculiar that I will defy any observer to find any one point by which the two can be classed together, beyond the one that they both deal with metal, and are subservient to ornament.

“ I am warned by time to close as rapidly as possible what I have to say ; but I earnestly entreat you to take this point of ornamentation seriously into consideration, because it forms one of the most important and characteristic criterions by which to judge of the tendency of a race. Sir Wm. Hamilton has this evening well observed that there is some reason in every ornament why it recommended itself to some particular people. We do not know what the reason was, but the dif-

ference itself is of the deepest moment. Where the material of which implements are composed itself defines the form which will be imposed upon them, there can be but little variety, and the difference can never be characteristic; but where the material is of such a nature that free play is given to the artistic feelings of the workman—where, as in clay or bronze, he is at liberty to impose what form and lines he will upon the yielding material, then the spirit and feeling of art reveals itself in the form which he adopts, and the prevalence of this may be made the measure of his culture. There is nothing more characteristic than the pottery of those early races, because the material enabled the workman to give to it whatever shape his feelings induced him to devise; and I believe that though the careful study of ancient ceramic art will show that the graceful forms of the Greek potter had very likely at some early period found their way even to the coast of the Baltic, and remained there as models to be imitated—readily imitated, indeed,—but still the instructed eye recalled the tradition of a higher culture, and added one link more to the chain which binds the civilization of the North and of the South together.

“I am painfully conscious how imperfectly I have touched many of the important subjects on which I had to speak, and I would not have ventured to claim your attention for so long a period but for the strong feelings of respect I have for many labourers of your body, and for the wish that we may be found hereafter working as much as possible together in one well-considered spirit of united inquiry. No man values higher than myself that noble spirit which makes us look with love upon the records of our own ancestors, and of our own land; nor can any man feel prouder than myself in the conviction of the high state of culture to which the earliest denizens of this island had attained. It is this feeling which induces us to adopt a study which has but little attraction for the great mass of mankind, and must be pursued with little sympathy and no profit; which supports us during inquiries that must be made

in loneliness, and often in sinking of heart, and which, even when pursued successfully, obtains but little echo in the heart of the general public. But let us not forget that we are liable here to prejudice, against which it befits us manfully to strive—the confining too much the view of our own field, in a spirit of narrow inquiry, excluding the claims of others. It is precisely from this feeling that my learned friend, Dr. Worsaae, has been led to refer the culture of all the northern nations to the influence of his own Scandinavian forefathers; and it is in the same narrow spirit of inquiry that most of the French archæologists have laboured, to the great disadvantage of our common study.

“Now, Gentlemen, let us, with the full spirit of an enlightened patriotism, devote ourselves to the illustration of our own antiquities; let us love them, and, loving them, labour to bring them to light; but let us not believe that they are all we have to learn, or that they convey all that can be taught. Let us look upon them only as links in one great chain, which embraces many nations, and many periods of human culture, which has no place of its own, unless considered in co-ordination with other links in a still greater chain, but the full elaboration of which is necessary before its cosmic relation can be well and thoroughly comprehended. Let us be sure that we are not exclusive, but comprehensive, in what we do; and let us, above all things, never lose sight of this great truth, that the interests of man have at all times led to a close communion between the several divisions of his race,—that nothing can be dissociated in History, and that nothing must be dissociated in the study of Archæology. While labouring to perfect our own portion of the work, let us look out abroad, and encourage our fellow-labourers to perfect theirs; and let us make them feel as we feel ourselves, that the work can only be profitably done when all men are called to lay their hands to it.

“While complimenting you on the magnificent collection which the Academy has formed, let me not utter words which

may induce you to flag in the work, or deem that you have reached the utmost goal that you can gain. Let me remind you that this magnificent collection is held by you in trust for a great European and scientific end ; that your wealth will be only the more full of use and beauty the more it is used to complete the collections of your less fortunate brethren. It is necessary, if those studies are to be anything more than laborious triflings, that we should all carefully understand that we are working towards one point, and in one spirit ; that we should have a mutual reliance on each other—not believing that the products of our own land can exhaust the great subject of archæological study, but that each land has its own portion to bring into the common stock ; and that, in proportion as each carefully elaborates its own collection, will be the beauty and solidity of the edifice which we can collectively raise.”